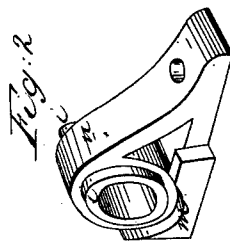
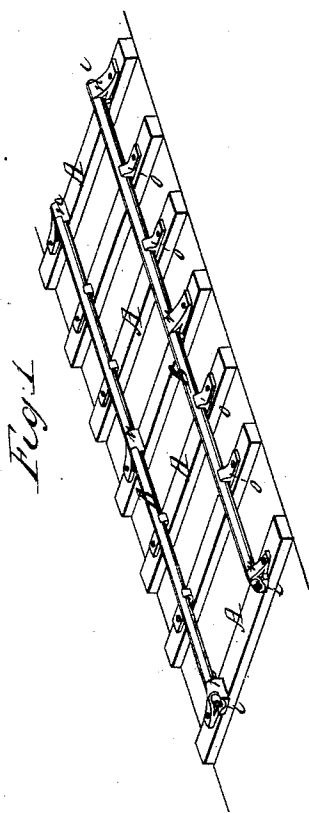


P. S. Devlan,
Railroad Chair,

N^o 11,827-

Patented Oct. 24, 1854.



UNITED STATES PATENT OFFICE.

PATRICK S. DEVLAN, OF READING, PENNSYLVANIA.

CHAIR FOR ROUND RAILS.

Specification of Letters Patent No. 11,827, dated October 24, 1854.

To all whom it may concern:

Be it known that I, PATRICK S. DEVLAN, of Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in the Construction of Railroads; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part thereof, in which—

Figure 1, represents a perspective of a portion of the track of a rail road laid down, after my plan. Fig. 2, represents, on a larger scale one of the joint chairs for supporting a cylindrical tubular rail.

Similar letters in both figures refer to like parts.

I am aware that many forms of tubular rails have been essayed, for rail roads; and that the outer jaw of a joint chair, has been so elevated as to take the tread of the wheel in passing, and raise it up and over the joint, but I do not claim either of these things as of my invention.

The nature of my invention relates to the method of confining cylindrical rails at their joints, by a chair which forms the rail between the joints, and so made as to keep and support the rails in their proper line, while they may at the same time be turned in their bearings in said chairs, as well as in their intermediate supports, for the purpose of presenting a new surface to the passing wheels, and wearing the rails away uniformly.

To enable others skilled in the art to make and use my invention I will proceed to describe the same with reference to the drawings.

The sills A of the road may be laid down in any of the usual forms well known to engineers, and upon these I place the track—it being composed of rails and chairs of a particular construction. The rails B, B, are cylindrical hollow tubes or pipes, of any suitable diameter, and supported immediately between the joints by chairs o, o, the outer jaws of which may rise to nearly the top surface of the rail—while the inner jaws should rise just far enough to allow the flange of the wheel to pass without striking. The seats in these intermediate chairs should be made to conform to the shape of the rails, and felt, rubber, or other elastic

medium may be introduced between the rail and these chairs, to relieve the jar or contact between them.

The joint chairs are seen in place at n n, &c., Fig. 1, and one of them at Fig. 2, on a larger scale detached, to better represent its form. This chair n n, has two projections i, i, one on each side, over which the ends of the hollow rails are slipped; and underneath these projections is a rounded seat m, for holding the perimeter of the rail, so that it shall not rest upon the projections i, more than is just sufficient to keep the rail in proper line. The top of the rail when in place is just the height of the top of the chair, and the chair itself is the rail between the joints. By this means a support is given to a round rail, which passes entirely around the rails. The projections i i, on the chair n, serve as journals upon which the rails may be turned in their bearings, so as to present a new wearing surface, while they are at the same time firmly held in line of the track.

This form of rail, gives the greatest possible strength with least amount of metal,—is easily made, and may be turned and used on any part of its diameter. The wheels may be such as are ordinarily used, or, their treads may be slightly concave, so as to present more rolling surface to the rotundity of the rail, if found essential.

Having thus fully described the nature of my invention, I would state that, I am aware that tubular rails of various forms have been devised for railroads; and that the outside jaw of an ordinary chair has been so elevated as to take the tread of the wheels in passing over the joint. These I do not claim; but

What I do claim herein as new, and desire to secure by Letters Patent, is—

The method of confining cylindrical rails at their joints, by a chair which forms the rail between the joints, and so made as to keep and support the rails in proper line, while they may at the same time be turned in their bearings in said chairs, as well as the intermediate ones, substantially in the manner and for the purpose described.

PATRICK S. DEVLAN.

Witnesses:

A. B. STOUGHTON,
S. B. UPPERMAN.